

CLAIMS

I claim:

- 5 1. A method for optimizing a snow flake query comprising:
 - (a) creating a logical node comprised of a child dimension table and all dimension tables rooted at said child dimension table; and
 - (b) determining commitment of said logical node for push down to a fact table;
- 10 2. The method of claim 1, wherein the step of determining commitment of said logical node for push down to said fact table includes committing an optimal number of logical nodes for push down to said fact table.
- 15 3. The method of claim 1, wherein the step of creating a logical node includes reducing a snow flake schema to a star schema.
4. The method of claim 1, wherein the step of determining commitment of said logical node for push down to said fact table includes calculating a cumulative selectivity for said logical node.
- 20 5. The method of claim 4, wherein the step of calculating a cumulative selectivity for said logical node includes a representation of all selectivities from all dimension tables in said logical node.
- 25 6. The method of claim 1, wherein the step of determining commitment of said logical node for push down to said fact table excludes a dimension table in said logical node from further consideration.

7. A system for optimization of a snow flake query, comprising:
a fact table;
at least two child dimension tables;
5 a logical node comprised of a child dimension table and all dimension tables
rooted at the child dimension table; and
an optimization module adapted to pledge said logical node for push down to said
fact table.
- 10 8. The system of claim 7, wherein said optimization module is adapted to commit an
optimal number of logical nodes for push down to said fact table.
9. The system of claim 7, wherein creation of said logical node reduces a snow flake
schema to a star schema.
- 15 10. The system of claim 7, wherein said optimization module comprises means for
calculation of a cumulative selectivity for said logical node.
11. The system of claim 10, wherein said calculation means includes a representation
20 of all selectivities for all dimension tables in said logical node.
12. The system of claim 7, wherein said logical node reduces search space traversal.
13. An article comprising:
25 a computer-readable signal-bearing medium;
means in the medium for storing data in a relational database having a fact table
and at least two child dimension tables;

means in the medium for creating a logical node comprised of said child dimension table and all dimension tables rooted at said child dimension table; and

means in the medium for determining commitment of said logical node for push down to said fact table.

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14. The article of claim 13, wherein the medium is selected from a group consisting of: a recordable data storage medium, and a modulated carrier signal.

15. The article of claim 13, wherein said means for determining commitment of said logical node for push down to said fact table includes committing an optimal quantity of logical nodes for push down to said fact table.

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16. The article of claim 13, wherein said means for creating said logical node reduces a snow flake schema of said database to a star schema.

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17. The article of claim 13, wherein said means for determining commitment of said logical node for push down to said fact table includes means for calculating a cumulative selectivity for said logical node.

18. The article of claim 17, wherein said means for calculating a cumulative selectivity for said logical node includes a representation of all selectivities for all dimension tables in said logical node.

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19. The article of claim 13, wherein said means for determining commitment of said logical node for push down to said fact table includes mitigation of search space traversal.

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